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(PTO ASSISTANCE)

Application : 10671461 Examiner : Lindsay, Jr. GAU : 2812

From : J. Black Location : (IDC) FMF FDC Date : 1/11/06

Tracking # : epm10671461 Week Date : 12/5/05

DOC CODE	DOC DATE	MISCELLANEOUS
<input type="checkbox"/> 1449	_____	<input type="checkbox"/> Continuing Data
<input type="checkbox"/> IDS	_____	<input type="checkbox"/> Foreign Priority
<input type="checkbox"/> CLM	_____	<input type="checkbox"/> Document Legibility
<input type="checkbox"/> IIFW	_____	<input type="checkbox"/> Fees
<input type="checkbox"/> SRFW	_____	<input checked="" type="checkbox"/> Other
<input type="checkbox"/> DRW	_____	
<input type="checkbox"/> OATH	_____	
<input type="checkbox"/> 312	_____	
<input type="checkbox"/> SPEC	_____	

[RUSH] MESSAGE: _____

Amendment - SPEC 5/12/05 (page 2) "Please replace
original Abstract with the amended abstract..."
Now new abstract found in file

Please resolve.

[XRUSH] RESPONSE: _____

SOL AMSC. COMM.

INITIALS: TJM

NOTE: This form will be included as part of the official USPTO record, with the Response document coded as XRUSH.

REV 10/04

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Ping HSU et al. Confirmation No: 1507
Appl. No. : 10/671,461
Filed : September 29, 2003
Title : IMPROVED DEEP TRENCH STRUCTURE
MANUFACTURING PROCESS

Publishing Division Via Facsimile 571-273-9009 -- Rory Burch

Docket No.: : HUSP3012/REF
Customer No: : 23364

AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is in response to the Official Action of January 31, 2006, in connection with the above-identified application. This response is timely filed.

Please amend the application as follows:

Amendments to the specification begin on page 2 of this paper.

Remarks begin on page 3 of this paper.

Appl. No. 10/671,461
Amendment dated: February 6, 2006
Reply to OA of: January 31, 2006

Amendments to the Specification:

Please replace the original Abstract with the amended Abstract which is found at the end of this paper on a separate sheet.

Appl. No. 10/671,461
Amendment dated: February 6, 2006
Reply to OA of: January 31, 2006

REMARKS

Applicants have received a Notice to File Corrected Application Papers Notice of Allowance Mailed in which it is stated that in the Amendment filed the specification is replacing the original abstract with the amended abstract, but the new Abstract is missing from the file. Accordingly, Applicants have submitted herewith a copy of the new amended Abstract which was not in the file. It is therefore, most respectfully requested that this objection be withdrawn.

Respectfully submitted,

BACON & THOMAS, PLLC

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REF:kdd
A04.wpd

February 6, 2006

ABSTRACT

Disclosed is a method for manufacturing deep trench structure comprising the steps of providing a substrate; forming a deep trench in the substrate; forming a nitride layer in the deep trench; filling the deep trench with a first polymer conductive layer; removing a portion of the nitride layer not covered by the first polymer conductive layer; refilling the deep trench with another nitride layer so that the sidewall of the deep trench not covered by the first polymer, is covered; partially removing unnecessary portion of the refilled nitride layer; forming a collar oxide layer in the deep trench; filling the deep trench with a second polymer conductive layer; removing a portion of the collar oxide layer not covered by the second polymer conductive layer; and filling the deep trench with a third polymer conductive layer.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,461	09/29/2003	Ping Hau	HSUP3012/6M	1507
23364	7590	01/31/2006		
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314				
			EXAMINER LINDSAY JR. WALTER LEE	
			ART UNIT 2812	PAPER NUMBER

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Date 2-2-06 Atty REF
 Action Due Correct. Paper
 Deadline —
 Final Deadline 3-2-06
 Based on —



**UNITED STATES PATENT AND TRADEMARK OFFICE**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Serial Number
10/671461

Date Mailed
1/31/06

NOTICE TO FILE CORRECTED APPLICATION PAPERS***Notice of Allowance Mailed***

This application has been accorded an Allowance Date and is being prepared for issuance. The application, however, is incomplete for the reasons below.

Applicant is given 30 days from the mail date of this Notice within which to correct the informalities indicated below. A failure to reply will result in the application being ABANDONED. This period for reply is NOT extendable under 37 CFR 1.136 (a) or (b).

- ♦ Amendment- Specification is replacing the original abstract with the amended abstract, but the new abstract is missing from file. Fax legible information to number below or e-mail.
- o For status updates visit <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR System, contact the Electronic Business Center (EBC) toll free at 866-217-9197.

APPLICANT MUST SUPPLY MISSING INFORMATION WITHIN 30 DAYS OF THE MAIL DATE OF THIS NOTICE.

A copy of this notice MUST be returned with the reply. Please address response to Commissioner for Patents P.O. Box 1450
Alexandria, VA 22313-1450

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